

**Amendments to the Claims:**

Please replace all prior claims versions and listings with the following:

**Listing of Claims:**

1. (canceled)
2. (canceled)
3. (currently amended) A ~~monolith~~ reactor as defined in claim 16 wherein longitudinal end portions of adjacent ones of said plurality of ~~monoliths~~ honeycomb substrates are in contact with each other.
4. (canceled)
5. (currently amended) A ~~monolith~~ reactor as defined in claim 4-16 wherein each of said plurality of stacked ~~monoliths~~ honeycomb substrates is in the form of an assembly of individual ~~monoliths~~ substrates cemented together about their longitudinal edges forming junctures between the ~~monoliths~~ honeycomb substrates.
6. (currently amended) A ~~monolith~~ reactor as defined in claim 5 wherein each assembly of ~~monoliths~~ honeycomb substrates is rotated up to about 90 degrees about a longitudinal axis of the reactor housing with respect to an adjacent assembly in the stack, or the honeycomb channels of the assembly are offset from the adjacent assembly, so as to provide a zigzag flow path through the reactor.
7. (canceled)
8. (currently amended) A ~~monolith~~ reactor as defined in claim 5 ~~wherein said~~ further comprises support means ~~includes including~~ a support grating positioned at the bottom of said stack of honeycomb substrates ~~monoliths~~, and having a grate

pattern similar to the junctures between the honeycomb substrates, ~~cemented monoliths~~.

9. (canceled).

10. (currently amended) A ~~monolith~~-reactor as defined in claim ~~4-16~~ wherein said plurality of ~~monoliths~~ are stacked within said housing, said means for supporting said ~~monoliths~~ includes at least one support member at a bottom portion of said stack, and said constant compression means includes spring compression means are urged against an upper portion of said stack of honeycomb substrates ~~monoliths~~.

11. (currently amended) A ~~monolith~~-reactor as defined in claim ~~10-8~~ wherein said spring compression means includes adjustment means for adjusting the amount of pressure applied to the ~~monoliths~~ honeycomb substrates within said stack between said support member grating and the upper portion of said stack by said spring means.

12. (currently amended) A ~~monolith~~-reactor as defined in claim 11 including a grate member positioned over the uppermost honeycomb substrate ~~monolith~~ in said stack, said spring compression means ~~including a spring member being~~ in contact with said grate member, and said adjustment means including threaded means adjacent said spring member for providing a predetermined pressure to said grate member and for maintaining said stack of ~~monoliths~~ honeycomb substrates under constant compression to prevent deleterious vibration, pressure and temperature effects on the ~~monoliths~~ honeycomb structures.

13. (currently amended) A ~~monolith~~-reactor as defined in claim 10 wherein at least one rod means, threaded at an upper end portion, extends through said stack of ~~monoliths~~ honeycomb substrates and ~~secured~~ secures at it upper end within said housing, said support member grating being secured to the bottom of said rod means and supporting the bottom ~~monolith~~ honeycomb substrate in said stack, a pressure grid positioned over the uppermost monolith in said stack, said spring means overlying said threaded rod portion, and adjustment means on said rod means for maintaining

said stack of ~~monoliths~~ honeycomb substrates under a constant predetermined compression to prevent deleterious vibration and compensate for different expansions between the stacked ~~monoliths~~ honeycomb substrates and reactor housing.

14. (currently amended) A ~~monolith~~ reactor as defined in claim 5 wherein cross-like spacers are provided between adjoining ~~monolith~~ honeycomb substrate assemblies in said stack, and a portion of said spacers being embedded within said adjoining assemblies.

15. (canceled)

16. (currently amended) A reactor for use in chemical processes ~~as defined in claim 15~~ comprising:  
a reactor housing,  
a plurality of honeycomb substrates positioned in a stacked relationship within said reactor housing along a longitudinal axis thereof, and  
means for holding said stacked substrates tightly together for preventing deleterious vibration of the substrates and for compensating for different expansions between the stacked substrates and the reactor housing, wherein said means for holding said honeycomb ~~structures~~ substrates tightly together includes spring compression means for maintaining a virtually constant predetermined compression on said stack of substrates.

17. – 20. (canceled)